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UNION CARBIDE CANADA LIMITED

1969 Annual Report



The Annual Meeting of Shareholders will be held on Thursday, April 30, 1970 at 11:00 a.m. in the Roof Garden of the Royal York Hotel, Toronto, Ontario.

Sur demande, il nous fera plaisir de vous envoyer l'édition française de ce rapport.

Directors and Officers



I.D. Sinclair



W.A. Dimma



J. de Billy



S.A. Hayden



A.T. Lambert



G.O. Loach





G.C. Wells



J.F. Shanklin

P.L. Alspaugh



R.F. Flood



W.S. Wyman



R.O. Holditch



R.S. Hughes

DIRECTORS

Robert F. Flood,

Toronto

Paul L. Alspaugh, Vice-President, Union Carbide Corporation, New York

Jacques de Billy, Senior Partner, Messrs. Gagnon, de Billy, Cantin, Dionne & La Haye, Quebec City

John S. Dewar, President, Union Carbide Canada Limited, Toronto

William A. Dimma, Executive Vice-President, Union Carbide Canada Limited, Toronto

Vice-President, Union Carbide Corporation, New York Salter A. Hayden, Senior Partner, Messrs. McCarthy & McCarthy,

Allen T. Lambert, Chairman of the Board and President, The Toronto-Dominion Bank, Toronto

John F. Shanklin, Vice-President and Secretary, Union Carbide Corporation, New York

Ian D. Sinclair. President, Canadian Pacific Railway Company, Montreal

George C. Wells, Vice-President, Union Carbide Corporation, New York

EXECUTIVE OFFICERS

John S. Dewar, President William A. Dimma, Executive Vice-President Richard S. Hughes, Vice-President Gerald O. Loach, Vice-President Whitford S. Wyman, Vice-President

Ross O. Holditch, Secretary and Treasurer

UNION UNION CARBIDE CANADA LIMITED With our compliments President No acknowledgement necessary

To Our Shareholders

Record sales and improved earnings were achieved by Union Carbide Canada Limited in 1969. Sales reached an all-time high of \$183.9 million, an increase of 10.7 per cent over the previous year. Earnings, including extraordinary income of \$1.5 million, were \$11.6 million or \$1.16 a share, 21.3 per cent higher than in 1968. Without the extraordinary income, earnings increased by 5.3 per cent.

The earnings figure marks a turn-around for Union Carbide. While falling short of the \$1.30 and \$1.31 per share attained in 1965 and 1966, it represents a considerable improvement over the results of the last two years.

In my last report, I noted that the earnings increase we would normally expect from productivity improvements and expanded markets was frustrated by a combination of factors, including the inflationary economy, the higher effective tax rate and declining prices for many of our products. At the time, I looked forward to a moderation in our declining price index, and our prices did stabilize to a large extent in 1969. The other inhibiting factors, however, are still present.

In 1970, we look forward to further improvements in sales and earnings. Similar environmental conditions as existed in 1969 are expected, with inflationary pressures persisting in view of the pattern of recent wage settlements across Canada. Under these conditions, productivity improvement is recognized as the key to sustaining our earnings growth.

Uncertainties surrounding the government's White Paper on Tax Reform, including the possibility of reductions in depreciation for income tax determination, pose a further problem for Canada's capital-intensive, technological industries. A more favourable climate for productive investment must be created if we are to achieve real growth in the economy.

In 1969, as in the past, a sizeable percentage of our production went overseas. This interesting and important facet of our operations is illustrated in the fold-out section at the back of this report.

There was one change in senior management during the year. In July, Ralph L. Baker was appointed general manager, Plastics and Chemicals, replacing J. F. Boire who moved to the United States to assume new duties with Union Carbide Corporation.

During the year, your officers reaffirmed the Company's objectives and emphasized them as a guideline throughout the organization. These are to optimize return on investment, to outperform the economy as a whole in growth of earnings per share, and to continue to be a good corporate citizen by contributing actively and positively to the well-being of Canada and its people.

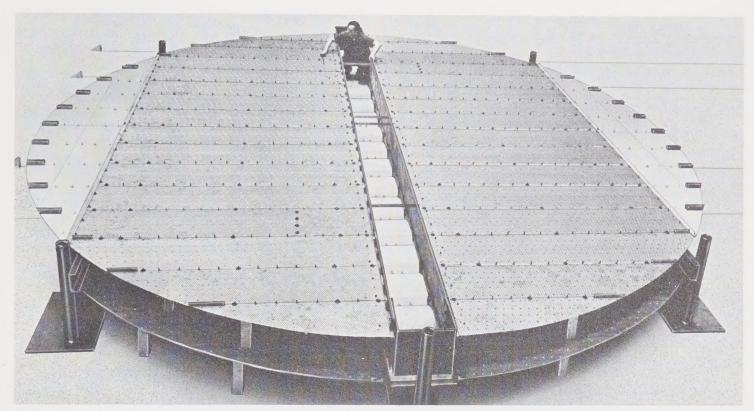
To all of our employees, I voice my sincere appreciation for their loyalties, and for their most significant contribution to the Company's success in 1969.

President

Financial Highlights

1969	1968
\$183,878,000	\$166,158,000
11,606,000 \$1.16	9,568,000
113,224,000 \$11.32	107,618,000
15,890,000	13,262,000
13,309,000	12,006,000
193,401,000	184,265,000
	11,606,000 \$1.16 113,224,000 \$11.32 15,890,000 13,309,000

1969 In Review



A 28-foot diameter stainless steel distillation tray is assembled at the Company's Mississauga, Ontario, apparatus and metal fabricating plant. More than 1,000 of these trays are being manufactured by

part of the production process at Atomic Energy's Bruce nuclear power complex at Douglas Point on Lake Huron.

Record sales of \$183,878,000, a 10.7 per cent increase over 1968 sales of \$166,158,000, were achieved in 1969 in spite of prolonged strikes in the steel and related industries served by Union Carbide Canada Limited. Each of the Company's groups shared in the improvement.

Net income was \$11,606,000, or \$1.16 a share, 21.3 per cent higher than the comparable figures for 1968. Included in the earnings are extraordinary items totalling \$1,527,000. These consist of a capital gain from the sale of the Company's rigid plastic container business, and a reduction in income taxes payable, resulting from what is commonly referred to as a "loss carry-forward" by certain subsidiaries. Before these extraordinary items, earnings totalled \$10,079,000, or \$1.01 a share, up 5.3 per cent from 1968.

Sales by group

Chemicals and Fibres sales increased over those in 1968, largely because of heavier demand for non-woven fabrics and for nylon products for carpeting. Sales of chemicals and anti-freeze also showed gains but at more modest rates.

Plastics sales were well ahead of the previous year. All products in this group shared in the increase which generally

reflected a continuation of the strong demand, particularly for polyethylene film for flexible packaging applications. For the first time in several years, there was only a nominal decline in prices for this group's products. Consequently the sales value, which had been level, showed a marked increase,

Sales of *Gases* increased, but at a slower rate than had been experienced in recent years. Shipments of this group's products were inhibited by strikes in the steel and nickel industries, and by work stoppages in the construction industry. Demand otherwise remained strong and, in total, a marginal sales growth was realized.

The Metals and Carbon businesses are inter-related, both having some markets in common and, to a large extent, sharing the same selling and administrative organization. This group showed the greatest sales improvement in 1969, primarily due to strong demand from the aluminum, phosphorous and automotive industries in Canada. Export markets also expanded as a result of the rapid growth in world steel production. This overall demand reversed the cyclical pattern, as little sales growth occurred the previous year.

Materials, Services and Other Costs of Doing Business Wages and Salaries Depreciation Federal and Provincial Income Taxes Dividends Paid Retained to Provide New Facilities and Working Capital

0 5	10	15	20	25	30
1		10	20	26%	
Steel, Non-ferrous A	Metals and Relat	ed Products		20,0	
Chemical, Petroleum	and Dalated Dr	adusta		26%	
chemical, remoteum	i anu nerateu ri		17%		
Wholesale and Reta	il Trade		1770		
	8%				
Machinery—Electric					
Transportation (inch		cle mfg.)			
4%					
Agriculture and Food					
3% Forest, Paper and Re	elated Products				
	10%				
All Other	1070				

	1969	1969		1968	
	Amount	Per Cent of Total	Amount	Per Cent of Total	Percentage Change Fron 1968
	(in thousands)		(in thousands)		
Chemicals and Fibres	\$ 31,625	17	\$ 30,387	18	+ 4
Plastics	51,922	28	46,686	28	+11
Gases	29,913	16	29,190	18	+ 3
Metals and Carbon	70,418	39	59,895	36	+17
	\$183,878	100	\$166,158	100	+11

Expansion program

Expenditures on construction amounted to \$15,890,000 as Union Carbide continued to expand and to introduce productivity improvements.

The largest single item was the expansion of graphite facilities at Welland, Ontario. This project, employing the latest technology, will increase the plant's capacity significantly. Construction was on schedule at year-end and is expected to be completed in late 1970. Also on schedule is a new air separation plant at St. Andrews, Manitoba, which should be on stream by the end of 1970.

Approximately half of the construction expenditures were devoted to a wide range of projects to improve Union Carbide's productivity. Among these were the modernization of the non-woven fibre products facility at Brampton, Ontario, and the erection of new 240-foot stacks at the Chicoutimi, Quebec, ferrosilicon plant.

A large number of similar projects to increase capacity and efficiency were under consideration at year-end. These will be presented for management approval during 1970.

Since 1967, the Company has been considering construction of a major petrochemical facility in Eastern Canada. The Tariff Board recommendation of a two-thirds reduction in the duty on imported petroleum fractions will, if implemented by the Government, considerably enhance the economics of the facility. The project is still under active review and a decision is expected during 1970.

Short-term financing

Increased cash requirements in 1969 necessitated a continuance of short-term financing by means of a bank loan. There were several contributing factors. These included accelerated income tax payments, a higher level of construction expenditures, and larger receivables and inventories stemming from sales growth.

Growing subsidiaries

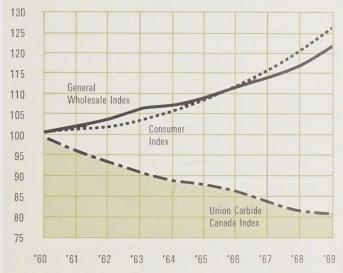
In June, Union Carbide acquired the minority interests in Chicoutimi Silicon Ltd. and Smelter Power Corporation, both located at Chicoutimi, Quebec.

Chicoutimi Silicon produces ferrosilicon which is sold domestically and on the export market. To meet market requirements, its plant operated at capacity throughout the year. Smelter Power has a hydro-electric generating station which provides power for the operation of Chicoutimi Silicon.

The Becker companies realized a very significant increase

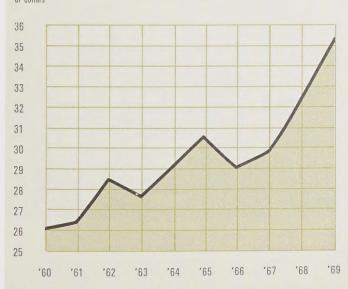
	1969		1968	
	Amount	Per Cent of Total	Amount	Per Cen of Total
Chemicals, Fibres and Plastics	(in thousands) \$ 2,885	18	(in thousands)	66
Gases	3,857	24	2,129	16
Metals and Carbon	9,148	58	2,371	18

Selling Prices (1960 Index = 100)



Dollar Sales per Employee

thousands of dollars



in sales in 1969 due to heavy demand from the construction industry. Sales to the mining exploration and soil sampling industries also improved. Operations were undertaken in several overseas countries as well as in Canada.

Production of quartzite by Union Carbide Canada Mining Ltd. continued at a significant level. This subsidiary also has a number of promising mining areas under investigation.

Employee relations

Efforts continued to improve employee working relationships and overall output to combat increasing costs.

Collective agreements with organized labour were re-negotiated at several locations in a climate of mutual understanding of the issues confronting both parties.

Employee safety was stimulated by a renewed emphasis on Total Loss Control, a concept introduced in 1967 to control all incidents which cause loss to Union Carbide. A major hazard survey was conducted in all groups to ensure that conditions which might cause serious injury or loss were identified and action plans developed. In December, the Arnprior fibres plant reached a safety landmark when it recorded a million accident-free hours, covering a period of more than a year and a half.

Dollar sales per employee increased again in 1969. Because most groups operated at capacity levels, the number of employees increased. However, the percentage increase in number of employees was considerably less than the percentage gain in sales dollars, indicating the Company's success in encouraging employees to find new ways of improving operations and productivity.

The employee benefit program was improved during the year, with revisions to both the pension and group insurance schemes. The medical care plan for employees was integrated where necessary with government programs, and modified to include extended health coverage.

New technology

Union Carbide's growth and expansion is dependent to a large extent on its extensive research and development program. In this connection, the Company has seven laboratories which create and adapt new products and processes to meet Canadian market situations. The popular plastic garbage bag, for example, was conceived, designed and introduced by Union Carbide in Canada in 1962, and currently is gaining widespread acceptance throughout North America.

In 1969, some major areas of the Company's research and development activities were: improved arc furnace technology to keep pace with the rapid growth in the use of



The EVEREADY alkaline battery, an important new power system pioneered by Union Carbide, was produced in Canada for the first time in 1969. Available in four popular sizes, alkaline batteries are ideally suited for toys, tape recorders or other heavy-duty uses involving a high-current power drain.

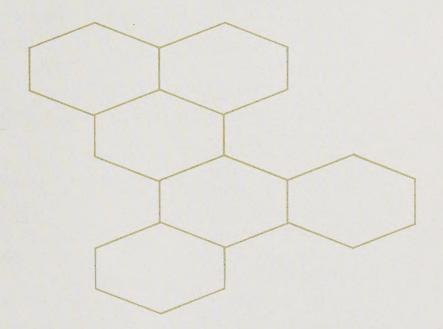
electric furnaces in steel production and the trend to higher power inputs; food freezing techniques utilizing the low-temperature properties of liquid nitrogen in tunnels to meet the growing consumer demand for convenience foods; new applications for the unique Becker drill, including its use in the perma-frost and frozen muskeg conditions prevalent in Canada's northland; a special film product for poultry packaging; and a successful application of the shrink film process for the bundling of cans and bottles, and the palletizing of industrial products.

Development of the new high density polyethylene process continued at Montreal East during 1969.

Union Carbide Canada Limited enjoys the additional advantage of having access to the technology created by Union Carbide Corporation, originating with several thousand engineers and scientists at locations all over the world.



Erection of structural steel for new facilities for the production of graphite nears completion on a 15-acre site adjacent to Union Carbide's plant at Welland, Ontario. The \$10 million expansion will employ the latest technology and increase the Company's graphite production capacity by 50 per cent.



1969 Consolidated Financial Statements

Consolidated Statement of Income and Retained Earnings

	Year E December		Year E December	
Sales		\$183,878,000		\$166,158,000
Cost of Goods Sold	\$134,453,000		\$120,664,000	
Selling, General and Administrative Expenses	15,286,000		14,038,000	
Depreciation (Note 7)	13,309,000		12,006,000	
Interest on Long Term Debt	1,334,000		1,351,000	
Amortization of Patents, Trade Marks and Goodwill	413,000	164,795,000	291,000	148,350,000
		19,083,000		17,808,000
Investment Income	545,000		302,000	
Gain on Disposal of Capital Assets	179,000	724,000	577,000	879,000
		19,807,000	-	18,687,000
Income Taxes (Note 5)				
Current	11,680,000		10,509,000	
Deferred	(1,952,000)	9,728,000	(1,082,000)	9,427,000
		10,079,000		9,260,000
Minority Interest		- 1		(308,000)
Income before Extraordinary Items		10,079,000		9,568,000
Income per Share	\$1.01		\$0.96	
Extraordinary Items (Note 8)		1,527,000		_
Net Income		11,606,000		9,568,000
Net Income per Share	\$1.16		\$0.96	
Retained Earnings at January 1		48,018,000		44,450,000
		59,624,000		54,018,000
Dividends Paid		6,000,000		6,000,000
Retained Earnings at December 31		\$ 53,624,000		\$ 48,018,000

Consolidated Statement of Source and Application of Funds

	1969	
Cash, January 1	\$ 4,099,000	
Source of Funds		
Net Income	11,606,000	
Depreciation	13,309,000	
Amortization of Patents, Trade Marks and Goodwill	413,000	
Transfer from Deferred Income Taxes	(1,952,000)	
	23,376,000	
Bank Loan	10,000,000	
Increase in Current Liabilities other than Bank Loan		
Net Value of Fixed Assets Sold (1969 Proceeds \$2,715,000)	1,664,000	
	35,040,000	
Application of Funds		
Investment in Fixed Assets	15,890,000	
Dividends Paid	6,000,000	
Increase in Current Assets other than Cash	5,733,000	
Decrease in Current Liabilities other than Bank Loan and Long Term Debt Due Within One Year	4,004,000	
Bank Loan		
Investments	1,921,000	
Patents, Trade Marks and Goodwill	826,000	
Long Term Debt	76,000	141.000
Other	286,000	508,000
	34,736,000	26,454,000
Increase in Cash	304,000	725,000
Cash, December 31	\$ 4,403,000	\$ 4,099,000



Consolidated Balance Sheet

as at December 31, 1969

4. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	December 31		
ASSETS	1969	1968	
Current Assets			
Cash	\$ 4,403,000	\$ 4,099,000	
Receivables			
Trade Notes and Accounts	27,717,000	25,937,000	
Trade Accounts—Affiliated Companies	2,728,000	2,702,000	
Other Notes and Accounts	2,673,000	3,189,000	
	33,118,000	31,828,000	
Inventories—valued at the lower of cost or net realizable value (Note 2)	36,895,000	32,534,000	
Prepaid Expenses	1,876,000	1,794,000	
TOTAL CURRENT ASSETS	76,292,000	70,255,000	
Fixed Assets (Note 3)	110,312,000	109,395,000	
Investments—at cost (no quoted market value)			
Subsidiaries (Note 4)	764,000	589,000	
Other Companies (Note 4)	2,266,000	1,993,000	
Mortgages and Notes Receivable	1,934,000	461,000	
	4,964,000	3,043,000	
Other Assets			
Deferred Charges	245,000	397,000	
Patents, Trade Marks and Goodwill—at cost less amortization	1,588,000	1,175,000	
	1,833,000	1,572,000	
	\$193,401,000	\$184,265,000	

Signed on behalf of the Board:

P. L. ALSPAUGH, Director

J. S. DEWAR, Director

	Decen	nber 31
LIABILITIES	1969	1968
Current Liabilities		
Bank Loan	\$ 10,000,000	
Accounts Payable	11,974,000	7,924,000
Accounts Payable—Affiliated Companies	5,811,000	8,376,000
Income and Other Taxes	1,259,000	6.578.000
Other Accrued Liabilities	4,665,000	4,835,000
Long Term Debt Due Within One Year	3,693,000	
TOTAL CURRENT LIABILITIES	37,402,000	27,713,000
Deferred Income Taxes (Note 5)	22,332,000	24,284,000
Long Term Debt (Note 6)	20,443,000	- 41
Minority Interest		438.000
SHAREHOLDERS' EQUITY Capital Stock		
Common Shares Without Nominal or Par Value Authorized —12,500,000 shares		
Issued and Outstanding—10,000,000 shares	59,600,000	59,600,000
Retained Earnings	53,624,000	48.018.000
	113,224,000	107,618,000
	\$193,401,000	\$184,265,000

Notes to the 1969 Consolidated Financial Statements

1. Principles of Consolidation

The consolidated financial statements include the accounts of the Company and all subsidiaries with the exception of three wholly-owned subsidiaries which are not significant to the consolidation and are not comparable to the Company's operations.

During 1969 the Company acquired the minority interests in Chicoutimi Silicon Ltd. and Smelter Power Corporation.

All assets and liabilities in foreign currencies have been translated to Canadian dollars at the exchange rate prevailing at December 31, 1969.

2. Inventories

Inventories at December 31 consisted of:

	1969	1968
Raw Materials and Supplies	\$10,273,000	\$ 9,346,000
Work in Process	9,388,000	9,136,000
Finished Goods	17,234,000	14,052,000
	\$36,895,000	\$32,534,000

3. Fixed Assets

The major classes of fixed assets at December 31 were:

		1969	1968
Land—at cost		\$ 4,733,000	\$ 3,302,000
Buildings—at cost	\$ 50,070,000		
Less: Accumulated Depreciation	19,636,000	30,434,000	29,189,000
Machinery and Equipment—at cost	170,559,000		
Less: Accumulated Depreciation	95,414,000	75,145,000	76,904,000
		\$110,312,000	\$109,395,000

4. Investments

The investment in subsidiaries consists of shares at cost of \$389,000, and advances of \$375,000.

The investment in other companies consists of shares at cost of \$1,888,000, and advances of \$378,000.

5. Income Taxes

The Company uses the tax allocation principle to provide for income taxes. The time in which transactions affect taxable income frequently differs from the time in which they enter

into the determination of income in the financial statements. The cumulative differences between taxes provided and taxes payable are shown as "Deferred Income Taxes" on the Consolidated Balance Sheet. The net effect of these timing differences for 1969 reduced Deferred Income Taxes by \$1,952,000 which reduction is reflected on the Consolidated Statement of Income and Retained Earnings.

"Income Taxes – Current" of \$11,680,000 on the Consolidated Statement of Income and Retained Earnings includes a credit adjustment of \$615,000 resulting from the allowance by the Department of National Revenue of the Company's deductions for scientific research expenditures and other items in prior years. This treatment is in accord with the Company's normal accounting practice and a similar credit adjustment in 1968 amounted to \$598,000.

6. Long Term Debt

a) Debentures, secured by a floating charge and held by affiliated companies as follows:

	1969	1968
5 % % Series, C, D and E due 1970	\$ 2,900,000	\$ 2,900 000
5½% Subordinated due 1971	2,100,000	2,100,000
5½% Second Subordinated due 1971	3,200,000	3,200,000
534% Second Subordinated due 1971	11,500,000	11,500,000
6% Second Subordinated due 1971	300,000	300,000
	\$20,000,000	\$20,000,000
b) A final payment due 1970 for shares purchase	d by the	
Company in a wholly-owned subsidiary	750,000	750,000
c) Bonds of a subsidiary as follows:		
5%% First Mortgage Sinking Fund Bonds matur	ing May	
1, 1977	3,386,000	3,462,000
	\$24,136,000	\$24,212,000
Less: Amounts due within one year included in	Current	
Liabilities	3,693,000	
	\$20,443,000	\$24,212,000

7. Depreciation

The Company uses straight-line depreciation for financial accounting purposes. Rates are based on estimates of lifemonths for each unit of depreciable fixed assets. Gain or loss on disposal of fixed assets is calculated on the remaining net book value at the time of disposal.

8. Extraordinary Items

a) Gain from the sale of the plastic rigid container business, after provision for income taxes of \$146,000

\$ 859,000

b) A reduction in income taxes payable by the application of prior-period losses in certain subsidiary companies' accounts

\$ 1,527,000

9. Retirement Program

Costs of the Company's retirement program for employees are funded annually. Trust funds exceed the actuarial liability for benefits vested in employees. Past service costs are being amortized over a 25-year period ending in 1989.

10. Commitments

Purchase commitments for capital expenditures outstanding at December 31, 1969 amounted to approximately \$6,492,000.

11. Directors' and Senior Officers' Remuneration

The total remuneration paid or payable in 1969 was \$124,925 to directors of the Company and \$166,833 to senior officers who were not directors. No payments were made to directors who are officers of Union Carbide Corporation.

Auditors' Report

HURDMAN AND CRANSTOUN

ACCOUNTANTS AND AUDITORS

To the Shareholders of Union Carbide Canada Limited, Toronto, Canada 36 TORONTO STREET TORONTO, CANADA

We have examined the consolidated balance sheet of Union Carbide Canada Limited and its consolidated subsidiaries as at December 31, 1969 and the consolidated statements of income and retained earnings and source and application of funds for the year then ended. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the companies as at December 31, 1969, and the results of their operations and the source and application of their funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Auraman Et Cranstown

Accountants and Auditors

Ten Year Summary

(dollars in thousands—except per share figures)

1969 196	8 1967
Sales	
Chemicals and Fibres \$ 31,625 \$ 30,5	\$ 26,320
Plastics 51,922 46,0	686 46,757
Gases 29,913 29,7	190 27,830
Metals and Carbon 70,418 59,8	895 60,072
\$183,878 \$166,	158 \$160,979
Net Income	
Amount 11,606 9,	568 9,226
% of Sales 6.3% 5	.8% 5.7%
Per Share (on 10,000,000 shares outstanding) 1.16	.96 .92
Total Assets 193,401 184,5	265 179,734
	1
Construction Expenditures 15,890 13,3	262 20,053
	i
Depreciation 13,309 12,0	006 11,501
	4
Employee Data	
	749 34,502
	131 5,405
Average Number of Employees 5,200 5,	3,400

1966	1965	1964	1963	1962	1961	1960
\$ 23,277	\$ 24,660	\$ 26,109	\$ 22,989	\$ 21,943	\$ 18,436	\$ 17,977
46,889	44,808	41,385	34,592	32,073	28,604	28,234
25,828	23,264	20,955	18,841	17,499	14,569	14,401
58,741	52,605	44,935	37,000	37,917	35,826	39,765
\$154,735	\$145,337	\$133,384	\$113,422	\$109,432	\$ 97,435	\$100,377
13,054	13,039	12,130	9,728	9,339	7,533	8,252
8.4%	9.0%	9.1%	8.6%	8.5%	7.7%	8.2%
1.31	1.30	1.21	.97	.93	.75	.83
166,108	150,379	141,962	139,233	126,923	122,169	114,539
24,465	13,560	13,432	8,993	5,621	10,435	20,213
9,966	8,876	8,335	8,010	8,079	7,266	5,951
0,000	0,0,0	0,000	0,010	0,0,0	7,200	0,00
31,682	26,833	24,886	21 204	20,057	18,725	18,998
			21,284			
5,335	4,736	4,573	4,092	3,852	3,705	3,853

The Export World of Union Carbide

While Union Carbide Canada Limited is primarily a domestically-oriented company serving the needs of Canadian industries and consumers, a wide range of the Company's products finds its way each year into countries in every corner of the globe.

Exports have played a significant role in Union Carbide's business volume over the past ten years, accounting for between seven and ten per cent of annual sales. In 1969, \$16 million worth of products, representing almost nine per cent of sales, went to the United States and overseas markets.



Most facets of the Company's diversified operations contributed to export sales. A variety of 16 products went by road, rail, sea and air to 20 different countries all over the world. Included in the shipments, which totalled close to 60,000 tons, were metals, plastics, chemicals and machinery.

Ferrosilicon, manufactured at Union Carbide's Beauharnois,



PLANTS / PRODUCTS

CARBON

Welland and Toronto, Ontario

Electric Arc Furnace Electrodes / Electrolytic Cell Anodes / Furnace Linings / Electric Motor and Generator Brushes / Theatre Projector Carbons / Carbon and Graphite Products for chemical, electrical, mechanical and metallurgical applications

CHEMICALS

Montreal East, Quebec / Belleville, Ontario

UNION CARBIDE Organic Chemicals including Ethylene Oxide, Ethanolamines, Glycols and Glycol Ethers / Agricultural Chemicals / Silicone Chemicals, Resins, Oils and Elastomers

CONSUMER PRODUCTS

Toronto and Walkerton, Ontario

EVEREADY Flashlight, Lighting, Photoflash, Hearing Aid, Transistor and other Electronic Batteries / EVEREADY Flashlight Cases and Lanterns / LINDE Star Sapphires and Rubies / Synthetic Crystals / PRESTONE Anti-Freeze Coolant and Car Care Products / "6-12" Insect Repellent / EVEREADY Automotive, Flashlight and Radio Panel Lamps / GLAD Wrap, Bags and Garbage Bags

FIBRES

Arnprior and Brampton, Ontario

UNEL Nylon / DYNEL Modacrylic Fibre / FIBERBOND Fabric and Filters

GASES

Vancouver and Vernon, British Columbia / Calgary and Edmonton, Alberta / Saskatoon, Saskatchewan / Thompson and Transcona, Manitoba / Thunder Bay, Sault Ste. Marie, London, Malton, Mississauga, Welland, Oakville, Sarnia and Ottawa, Ontario / Noranda, Arvida, Montreal, Montreal East, Tracy, Lauzon and Sept-Iles, Quebec / Saint John, New Brunswick / Halifax, Nova Scotia

LINDE Oxygen, Nitrogen, Hydrogen, Argon and Rare Gases / Calcium Carbide and Acetylene / Welding, Cutting, Forming and Heat-Treating Apparatus / Coatings Service / Steel-Conditioning Machines / Rock-Piercing and Shaping Equipment / Medical Gases, Inhalation and Suction Therapy Equipment / Distillation Trays / Cryogenic Equipment / Proppants / Food Freezing Equipment / In-Transit Refrigeration Systems / Molecular Sieves / Special Alloys to resist heat, corrosion and wear

METALS

Welland, Ontario / Beauharnois, Quebec

Ferroalloys, Alloying Metals, Pure Metals and Metal Compounds produced from the elements Boron, Calcium, Chromium, Columbium, Manganese, Silicon, Tantalum, Titanium, Tungsten, Vanadium and Zirconium

PLASTICS

Surrey, British Columbia / Fort Garry, Manitoba / Lindsay, Orangeville and Belleville, Ontario / Cowansville and Montreal East, Quebec / Amherst, Nova Scotia

UNION CARBIDE Phenolic Resins and Compounds / Polyethylenes and Co-Polymers / Epoxy Resins / Phenoxy Resins / Vinyl and Polystyrene Co-Polymer Resins and Compounds / Polysulfone Resins / Polyethylene Film / Industrial Shipping Bags / Flexible Packaging / VISKING Cellulose and Fibrous Food Casings

WHOLLY-OWNED CONSOLIDATED OPERATING SUBSIDIARIES

Becker Drills Ltd. and its wholly owned subsidiaries—devices for drilling through overburden

Chicoutimi Silicon Ltd.—ferrosilicon

Dominion Viscose Products Limited—viscose food casings

Smelter Power Corporation—electric power

Union Carbide Canada Mining Ltd.—mining and exploration for minerals

Quebec, plant, went to Australia, Japan, New Zealand, the United Kingdom and the United States for use in steel production. Silicon, an alloying metal used in the production of aluminum, was shipped from Beauharnois to Australia and India. Polyethylene, made at the Company's Montreal East petrochemicals complex, was exported to Hong Kong, South Africa and West Germany where it was used primarily in the manufacture of plastic pipe.

Another Montreal East product, NIAX polyol, an ingredient of urethane foam used for cushioning and clothing laminates, was exported to Argentina. Carbon cathode blocks from Welland, Ontario, went to Australia, India, Norway and the United Kingdom where they were used in the electrolytic smelting of aluminum.

Other products of the Welland plant sold overseas were consumable graphite anodes which went to Australia and Sweden for the chlorine processing industry, and graphite and carbon electrodes, shipped to the Dominican Republic and Norway for use in electrometallurgical furnaces producing ferroalloys, nickel and steel.

Exports were also an important factor for two Union Carbide subsidiaries. Chicoutimi Silicon Ltd. shipped large quantities of ferrosilicon to Colombia. The Philippines, the United Kingdom and the United States in 1969, and has earmarked 50 per cent of its 1970 production for the American market. Becker Drills Ltd. sold drilling rigs and replacement parts to Pakistan, Indonesia, New Caledonia and the United States.

The Company's export operations are conducted by a department of seven, reporting to Gerald O. Loach, a vice-president of Union Carbide, who currently is serving his second term as chairman of the Canadian Export Association.

Union Carbide's export markets vary almost as widely as the Company's manufacturing operations. Some are traditional, providing a continuing outlet for products year after year. Food casings, for example, produced at Lindsay, Ontario, have found regular markets in Australia, Sweden, the United Kingdom and Venezuela where they are used in wiener and sausage production. East Germany became a new customer in 1969. Phenolic plastics, produced at Belleville, Ontario, are exported on a continuing basis to a number of European countries, including Belgium, Denmark, Holland, Portugal and Spain.

Other overseas markets for Union Carbide are of a "spot" nature where the Company's products are called upon to meet a temporary need. Most chemical exports fall into this category and are shipped to meet an overseas customer's shortage of supply that might have been caused by a plant break-down or an unexpected upswing in market demand.

Examples in 1969 were shipments of ethylene glycol to Belgium and the United Kingdom for anti-freeze production and fibre applications.

A key factor in the Company's export operations is Union Carbide's affiliation with its United States parent and the Corporation's world-wide network of plants and facilities. Frequently, the Canadian company ships products to help meet local production shortages in many of the 30 countries where Union Carbide Corporation plants are located.

In addition to direct exports, Union Carbide also contributes significantly to Canada's balance of payments in a secondary way by supplying processed materials to some of the country's largest exporting industries.

Such products as carbon cathode blocks for the aluminum industry; ferroalloys, carbon and graphite for the automotive and steel industries; chemicals for the natural gas industry; and anodes for the production of chlorine for the pulp and paper industry are all supplied by Union Carbide. End products of these industries are sold all over the world.

In 1969, shipments by Union Carbide of processed materials to other Canadian companies for use in the manufacture of products for export approached the \$16 million value of the Company's direct exports.





Union Carbide's export manager John Vanderkop (left) discusses an overseas order with Tom Bond (seated) of the export department and assistant manager Roland Perron.

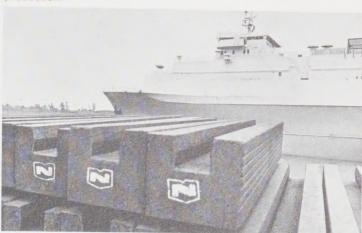




Ferrosilicon in a range of grades and sizes is loaded on to a Norwegian freighter at Chicoutimi, Quebec, for shipment to the United Kingdom. The alloy is produced by Union Carbide at plants in Chicoutimi and Beauharnois, Quebec.

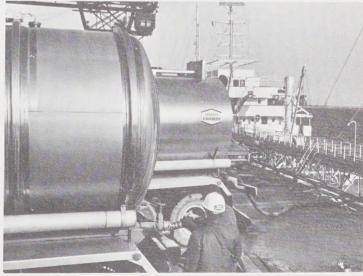
This truck-mounted hammer drill was shipped to the island of New Caledonia in the South Pacific for use in an exploration drilling program on a nickel laterite property. The unique drill was invented by Becker Drills Ltd., a subsidiary of Union Carbide Canada Limited, and is produced at Becker's Blairmore, Alberta, plant.

Carbon cathode blocks line the docks of the Welland Canal near Union Carbide's Welland, Ontario, metals and carbon plant. The blocks are shipped to Australia, India, Norway and the United Kingdom for use in aluminum production.





At Montreal International Airport, samples of polyethylene resin are loaded aboard a CP Air flight for a customer in Hong Kong.



Ethylene glycol is piped from tanker trucks aboard a freighter at Montreal harbour for shipment to Belgium. The chemical is produced at Union Carbide's Montreal East petrochemicals complex.



Head Office
123 Eglinton Avenue East, Toronto 12, Canada

Transfer Agent and Registrar
Canada Permanent Trust Company,
Toronto, Halifax, Montreal, Winnipeg and Vancouver

Stock Exchange Listings
Montreal, Toronto and Vancouver

Auditors
Hurdman and Cranstoun, Toronto

Sales in the first half of 1969 were \$88,567,000, an increase of 10.6 per cent over sales of \$80,058,000 during the same period last year.

Net income of \$5,875,000 or 59¢ per share is made up of \$5,016,000 or 50¢ per share from operations, and \$859,000 or 9¢ per share from the sale of our plastic rigid container business, the latter being displayed as an Extraordinary Item. The 50¢ per share from operations is an increase of 23 per cent over the 41¢ per share from operations earned in the first six months of 1968.

We anticipate that the earnings from operations for the last half of this year will show an improvement over the same period in 1968, although the rate of improvement may not equal that experienced in the first half.

Construction is on schedule for the \$10 million carbon and graphite plant at Welland, Ontario. In addition, the Company recently announced construction of a \$2 million air separation plant in Manitoba, and acquisition of the minority interest in Chicoutimi Silicon Ltd. and Smelter Power Corporation at Chicoutimi, Quebec. No decision has yet been made on our plans to build a new petrochemical plant in Eastern Canada.

J. Dewar .
President

AR02



Executive Officers

J. S. Dewar, President

W. A. Dimma, Executive Vice-President

R. S. Hughes, Vice-President

G. O. Loach, Vice-President

W. S. Wyman, Vice-President.

R. O. Holditch, Secretary and Treasurer

Head Office

123 Eglinton Avenue East, Toronto 315, Canada

Transfer Agent and Registrar

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Stock Exchange Listings

Montreal, Toronto and Vancouver

Consolidated Operating Subsidiaries

Becker Drills Ltd. and its consolidated subsidiaries Chicoutimi Silicon Ltd.

Dominion Viscose Products Limited

Smelter Power Corporation

Union Carbide Canada Mining Ltd.



Union Carbide Canada Limited

Semi-Annual Report June 30,1969



Interim Consolidated Income Statement

(subject to year-end audit and adjustment)	Six months ended June 30				
	1969		1968*		
Sales		\$88,567,000		\$80,058,000	
Cost of Goods Sold	\$64,186,000		\$58,079,000		
Selling, General and Administrative Expenses	7,105,000	71,291,000	6,906,000	64,985,000	
	Mark Teany	17,276,000		15,073,000	
Depreciation	6,579,000		6,220,000		
Interest on Debentures	664,000		671,000		
Amortization of Patents, Trade Marks and					
Goodwill	180,000	7,423,000	145,000	7,036,000	
		9,853,000		8,037,000	
Investment Income	255,000		116,000		
Gain on Disposal of Capital Assets	49,000	304,000	210,000	326,000	
Income before Income Taxes and					
Extraordinary Item		10,157,000		8,363,000	
Income Taxes					
Current	6,031,000		4,811,000		
Deferred	(890,000)	5,141,000	(520,000)	4,291,000	
Income Before Extraordinary Item		5,016,000		4,072,000	
Extraordinary Item		859,000			
Net Income		\$ 5,875,000		\$ 4,072,000	
Net Income per share		\$ 0.59		\$ 0.41	

Interim Consolidated Statement of Source and Application of Funds

(subject to year-end audit and adjustment)	Six months ended June 30		
	1969	1968*	
Cash, January 1	\$ 4,099,000	\$ 3,374,000	
Source of Funds			
Net Income	5,875,000	4,072,000	
Depreciation	6,579,000	6,220,000	
Amortization of Patents, Trade Marks and Goodwill	180,000	145,000	
Transfer from Deferred Income Taxes	(890,000)	(520,000)	
	11,744,000	9,917,000	
Bank Loan	3,500,000	1,500,000	
Net Value of Fixed Assets Sold	1,363,000	345,000	
	16,607,000	11,762,000	
Application of Funds			
Decrease in Current Liabilities other than Bank Loan	6,346,000	2,942,000	
Increase in Current Assets other than Cash	4,228,000	(1,577,000	
Investment in Fixed Assets	3,382,000	6,124,000	
Dividends Paid	3,000,000	3,000,000	
Investments	1,316,000	1,631,000	
Patents, Trade Marks and Goodwill	826,000		
Other	467,000	235,000	
	19,565,000	12,355,000	
Decrease in Cash	2,958,000	593,000	
Cash, June 30	\$ 1,141,000	\$ 2,781,000	

^{*}restated to include the consolidation of Chicoutimi Silicon Ltd. and Smelter Power Corporation.